

Appln. No. 10/799,008

Attorney Docket No. 10541-1941

## II. Remarks

Reconsideration and re-examination of this application in view of the above amendments and the following remarks is herein respectfully requested.

*Claim Rejections – 35 U.S.C. §103*

Claim 2 was rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. US20030230273 to Koelmel et al. (Koelmel) in view of Japanese Patent No. 410102621 to Murakami (Murakami).

Claim 2 has been withdrawn.

Claims 4-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Koelmel in view of Murakami and U.S. Patent No. 6,183,211 to Wood (Wood) and further in view of U.S. Patent No. 4,539,947 to Sawada et al. (Sawada).

Claims 4-7 have been withdrawn.

Claims 12-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Koelmel in view of Murakami and Sawada.

Claim 12 recites that a first actuator is coupled to the first member and configured to translate the first member changing the resonator volume and the neck length. Further, a second actuator is coupled with the first member and the neck. As such, the second actuator is coupled to the translating first member. In addition, the second actuator is configured to adjust the neck length relative to a position of the first member.

The examiner contends that this element is taught by the combination of Koelmel, Murakami, and Sawada. Koelmel is the only reference that teaches two actuators. However, the two actuators of Koelmel function independently, as shown in Figure 4. Therefore, Koelmel does not teach a second actuator being coupled to

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the member translated by the first actuator. Moreover, Koelmel does not teach the second actuator changing the neck length in relation to the position of the first member. Rather, Koelmel teaches against this relationship by teaching independent actuators.

Murakami teaches a single actuator and to the best of applicants' understanding does not teach or suggest multiple actuators. While Murakami does teach the first actuator translating a member, the member is only coupled to the single actuator and not to any other elements within the resonator. Clearly, Murakami could not teach two actuators being coupled to the translated member.

Similar to Murakami, Sawada teaches a single actuator and does not teach or suggest multiple actuators. Sawada does teach the first actuator translating a member, although it is not entirely clear whether translating the member changes the length of the neck as the examiner contends or merely the cross section of the opening. Regardless, nothing in Sawada suggests that a second actuator would be coupled to the translated member.

At most, the most the combination teaches using two independent actuators, one for the neck length and separately an actuator to change the volume. Nothing in any of the references teaches or suggests a second actuator attached to the translated member and adjusting the neck length relative thereto.

Accordingly, no factual basis is provided to support a *prima facie* case of obviousness. "The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." MPEP §2142. Further, the examiner's general contention that "it would have been obvious to one of ordinary skill in the art to vary the relationship in which ever way was most conducive to the environmental constraints such as space under a hood" does not provide factual support necessary

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to establish a *prima facie* case of obviousness. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte*, Clapp, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985).

In this instance, the cited references alone or in combination do not teach "a first actuator coupled to the first member and configured to translate the first member changing the resonator volume and the neck length; and a second actuator coupled with the first member and the neck, the second actuator being configured to adjust the neck length relative to a position of the first member." Therefore, they do not teach the present invention according to claim 12.

Claims 13-14 depend from claim 12 and are, therefore, patentable for at least the same reasons as given above in support of claim 12. Accordingly, applicants respectfully request withdraw of the rejections under 35 U.S.C. §103(a).

Claim 15 recites that a second member is coupled to the first member and neck, the second member being configured to change the resonator volume in relation to the neck length. None of the cited references teach a second member coupled to the first member and the neck, where the second member is configured to change the resonator volume in relation to the neck length.

#### *New Claims*

Claims 20 and 21 depend from claim 12 and are, therefore, patentable for at least the same reasons as given above in support of claim 12.

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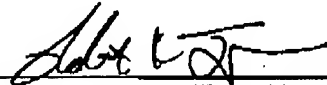
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*Conclusion*

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is respectfully requested.

Respectfully submitted by,

Dated: October 1, 2007  
Robert K. Fergan (Reg. No. 51,674)BRINKS  
HOFER  
GILSON  
ATTORNEYS

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